## Nathan Burgers

## iOS & Back-End Systems Developer

Education

2012-Present Computer Science, University at Buffalo, 3.9/4.0.

Professional Experience

2011-Present iOS & Full-Stack Web Developer, Refulgent Software LLC., Amherst, New York.

Work with a team of developers creating a restaurant Point of Sale system for iOS. Design, develop, and maintain secure automated financial systems.

## **Detailed achievements:**

- Actively worked with a team on a large-scale Objective-C code-base
- o Developed caching scheme for large images on devices with limited memory and processing capability
- Created internal Functional Objective-C libraries providing: infinite data structures, implicit memoization, and parser generation, etc.
- o Automated entire application activation infrastructure
  - Automated software licensing over encrypted, timestamped channels
  - Encrypted sensitive client information
  - Provided internal activation and analytics API
  - Developed API frontend

## Open Source Work

2013-Present MLRTEMS, Research under Professor Lukasz Ziarek, University at Buffalo.

An extension of the MLton Standard-ML compiler for interfacing with the RTEMS real-time embedded systems executive, which aims to provide real-time guarantees to embedded functional programming.

Extracurricular Activity

2013 Creator of the Lark Language, Top 10, Most Technically Challenging, and Best iOS App at MHacks

github.com/nateburgers/LarkDemo

2013 iOS Developer of Playper, Top 10 at HackMIT github.com/nateburgers/Playper

2013 Back-End Audio Developer of Theramixer, Second place at HackPrinceton github.com/buffalohackers/Theramixer

2013 WebRTC Developer of WebDrop, First Place at Hack Upstate github.com/buffalohackers/WebDrop

2013 Google Summer of Code: Developed an automatic, ad-hoc build toolchain for the RTEMS real-time embedded systems executive.

2012-Present Member of the University at Buffalo chapter of The Association for Computing Machinery

2012-Present Volunteer for UBHacking, the University at Buffalo Hackathon

Skills

Development Languages and DSLs, Back-End Server Systems, iOS

Languages Objective-C, Ruby, Javascript, Java, Clojure, Haskell, Standard-ML (& Familiar with Others)